

IN THE CLAIMS

Please amend the following Claims as indicated.

1. (Currently amended) An error correction method for use with a noisy communication channel, said method comprising the steps of:
dividing a data stream into symbols;
sampling the divided data stream ~~in~~ and placing samples into threads, wherein samples
are taken at fixed time intervals;
inserting a correction symbol ¹⁷ into the data stream to mix the correction symbol with data symbols, by inserting the correction symbol next to data symbols that have a fixed time separation;
transmitting the data stream;
receiving the transmitted data stream;
performing error detection and correction computations on the data and error correction symbols; and
outputting an error corrected data stream.

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2. (Currently amended) The method of Claim 1 wherein the ~~bursty~~ noisy communication channel comprises a satellite communication link.

3. (Currently amended) The method of Claim 1 wherein the ~~bursty~~ noisy communication channel comprises a scratched compact disk.

4. (Currently amended) The method of Claim 1 wherein the ~~incoming~~ data stream comprises symbols are in the form of bits.

5. (Currently amended) The method of Claim 1 wherein the ~~incoming~~ data stream comprises symbols are in the form of bytes.

6. (Currently amended) The method of Claim 1 wherein the ~~incoming~~ data stream comprises symbols are in the form of words.

7. (Currently amended) The method of Claim 1 wherein samples are taken at fixed time intervals that are longer than the time ~~interval of the bursts of data~~ intervals of error bursts caused by the noisy channel.

8. (Currently amended) The method of Claim 1 wherein the step of performing error detection and correction comprises performing error correction with a cyclic redundancy check error correction.

9. (Currently amended) The method of Claim 1 wherein the step of inserting a correction symbol into the data stream comprises the step of inserting the same correction symbol ~~is~~ in more than one thread.

10. (Currently amended) An error correction method for use with a noisy communication channel, said method comprising the steps of:

receiving an incoming data stream;

copying each data symbol that is to be transmitted onto a register;

5 placing each data symbol onto a transmit output buffer in a predetermined position, wherein positions between ~~each~~ ~~the data symbol symbols~~ are filled with error correcting symbols calculated after a register gets filled;

transmitting a symbol transmission stream from the transmit output buffer;

receiving the transmitted transmission stream;

10 placing data and error correction symbols from the symbol transmission stream on predetermined registers;

performing error detection and correction computations on the data and error correction symbols;

placing the corrected data symbols on a receive output buffer in their correct positions;

15 and

outputting an error corrected data stream from the receive output buffer.

11. (Currently amended) The method of Claim 10 wherein the ~~bursty noisy~~ communication channel comprises a satellite communication link.

12. (Currently amended) The method of Claim 10 wherein the ~~bursty noisy~~ communication channel comprises a scratched compact disk.

13. (Currently amended) The method of Claim 10 wherein the ~~incoming data stream~~ comprises symbols are in the form of bits.

14. (Currently amended) The method of Claim 10 wherein the ~~incoming data stream~~ comprises symbols are in the form of bytes.

15. (Currently amended) The method of Claim 10 wherein the ~~incoming data stream~~ comprises symbols are in the form of words.

16. (Currently amended) The method of Claim 10 wherein samples are taken at fixed time intervals that are longer than the time ~~interval of the bursts of data intervals of error bursts caused by the noisy channel.~~

17. (Currently amended) The method of Claim 10 wherein the step of performing error detection and correction comprises performing error correction with a cyclic redundancy check ~~error correction~~.

18. (Currently amended) The method of Claim 10 wherein the step of inserting a correction symbol into the data stream comprises the step of inserting the same correction symbol ~~is~~ in more than one thread.